

BEST AVAILABLE COPYREMARKS

Upon entry of this Response, claims 1-10, 12-34, 48-51, and 53-58 remain pending in the present patent application. Claims 1, 8, 12, 14, 28, 48, 49, 54, and 55 have been amended, and claims 11 and 52 have been canceled without prejudice or disclaimer. Applicants expressly reserve the right to pursue the subject matter of any canceled claims in a continuing application. Applicants request reconsideration of the pending claims in view of the following remarks.

As an initial matter, Applicants first wish to express their appreciation for the time Examiner Alexandra Awai spent with Applicants' representative, Minh Nguyen, during telephone discussions on May 3, 2006 and May 23, 2006, regarding the outstanding final Office Action. During the May 3rd conversation, we discussed the final Office Action, the claims and the cited art mentioned in the Office Action. During the May 23rd conversation, Applicants' representative presented the Examiner proposed claims and response. In both conversations, no agreement was reached.

In item 4 of the Office Action claims 1-34 and 48-58 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Specifically, it is alleged that the relationship is unclear as defined by having various sidewalls of the tubes in the container to be "substantially aligned." Appropriate amendments have been made to claims 1, 4, and 49. In addition, Applicant points to Figure 9 as showing how the walls of the tubes align along a straight line as per the description of Figure 9 on page 11 and with regard to other portions of the specification that describes the same feature. Applicants respectfully assert that one skilled in the art will understand that aligning the walls refers to the alignment of the walls as set forth in Figure 9 and as described elsewhere in the specification with reference to other figures.

In addition, claim 28 has been rejected as it is alleged it is ambiguous as to whether a single corner is intended to have both recesses and flat surfaces. Claim 28 has been amended so as to describe the fact that recesses and flat surfaces may be located on any one of the corners in any combination. Applicants assert that one skilled in the art will understand the meaning of this claim element.

In addition, it is alleged that it is not clear how the weld recited in claim 56 is positioned so as not to be subject to the horizontal bearing load because the weld does presumably couple in

components that are subject to this load and the direction of the horizontal bearing load is indefinite. Applicants respectfully disagree. In particular, the weld is between the head of the pin and one of the rods through which the pin is inserted. The horizontal bearing load is transferred through the rods and the pin to adjacent tubes. In this respect, the weld merely holds the pin in place through the opening of the rods. Applicants assert that one skilled in the art can appreciate this fact based upon the description of the specification. In addition, Applicants assert that one skilled in the art understands precisely what is meant by the horizontal bearing load between the tubes as described in the specification. Accordingly, Applicants respectfully request that the rejection of claims 1-34 and 48-58 under 35 U.S.C. § 112, second paragraph, be withdrawn.

Next, claim 1 has been rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,009,136 issued to Loftis, et al. (hereafter "*Loftis*"). Anticipation under §102 "requires the disclosure in a single prior art reference of each element of the claim under construction." W.L. Gore & Associates, Inc. v. Garlock, Inc., 220 USPQ 303, 313 (Fed. Cir. 1983). For the reasons that follow, Applicant asserts that *Loftis* fails to show or suggest each of the elements of claim 1. Accordingly, Applicant requests that the rejection of claim 1 be withdrawn.

Claim 1 has been amended so as to recite as follows:

1. A container for storing or transporting spent nuclear fuel, the container comprising:
 - a plurality of tubes that receive spent nuclear fuel assemblies, each tube having four sidewalls and four corners defining a rectangular cross section;
 - an attachment means for attaching respective pairs of a plurality of corners of the tubes to each other, at least one corner of a first one of the tubes engaging another corner of a second one of the tubes, ***the attachment means comprising a plurality of recesses in respective ones of the corners and a plurality of rods that are positioned in the recesses between respective engaged ones of the corners;***
 - each engaged corner of the first and second ones of the tubes being formed from an intersection of a first sidewall and a second sidewall, the first and second side walls being normal to each other;
 - the first sidewall of the first one of the tubes and the first sidewall of the second one of the tubes being in substantial alignment with a first straight line; and
 - the second sidewall of the first one of the tubes and the second sidewall of the second one of the tubes being in substantial alignment with a

second straight line.

Claim 1 has been amended so as to recite the fact that a plurality of recesses are disposed in the various corners of the tubes, and that the rods are positioned in recesses between the engaged ones of the corners. Applicants respectfully assert that *Loftis* fails show or suggest each of the elements of claim 1 as amended herein.

In addition, claim 1 recites that the corners of the first and second ones of the tubes are formed at an intersection of the first and second sidewall, where the first and second sidewalls are normal to each other. Also, claim 1 states that the first sidewall of the first one of the tubes and the first sidewall of the second one of the tubes are in substantial alignment with a first straight line, and a second sidewall of the first one of the tubes and a second sidewall of the second one of the tubes are in substantial alignment with a second straight line. In this respect, the sidewalls as described form a corner, and, the respective corners formed by such sidewalls are engaged with each other. Thus, the corners of two tubes having respective sidewalls as described in claim 1 that are engaged must have the respective sidewalls in alignment as set forth in claim 1. As noted, for example, in Figure 1 of *Landis*, the rod segments 5 cause the tubes to be offset with respect to each other such that the respective sidewalls as set forth in claim 1 are not in alignment along straight lines. Accordingly, Applicants assert that the rejection of claim 1 is improper. Therefore, Applicants respectfully request that the rejection of claim 1 be withdrawn.

Next, in item 6 of the Office Action, claim 18 has been rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,034,227 issued to Soot (hereafter "Soot"). Anticipation under § 102 "requires the disclosure in a single prior art reference of each element of the claim under construction." *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 220 USPQ 303, 313 (Fed. Cir. 1988). For the reasons that follow, Applicants assert that Soot fails to show or suggest each of the elements of claim 18 as amended. Accordingly, Applicants respectfully request that the rejection of claim 18 be withdrawn.

To begin, claim 18 as amended recites as follows:

18. A container for storing spent nuclear fuel, the container comprising:
- a plurality of tubes that receive spent nuclear fuel assemblies, each of the tubes having a plurality of recesses;
 - a plurality of first rods being mounted in respective ones of the

recesses; and

wherein at least one first rod mounted on a respective one of the tubes is attached to at least one of the first rods mounted on at least one second one of the tubes, thereby linking the respective one of the tubes and the at least one second one of the tubes together, *wherein each of the first rods is seated in both a first one of the recesses of the respective one of the tubes and a second one of the recesses of the at least one second one of the tubes.*

As set forth above, claim 18 further recites that each of the first rods are seated in both a first one of the recesses of the respective one of the tubes and a second one of the recesses of the at least one second one of the tubes. In this respect, the recesses are formed in the walls of the tubes themselves, and the rods fit between the walls and in the recesses of two adjacent tubes with corners that engage the rods, respectively. The fact that each of the rods engages or is seated within the recesses of two adjacent tubes as set forth in claim 18 above provides a significant advantage in that the tubes may be larger, thereby holding a greater amount of spent nuclear fuel. Given the significant cost associated with the storage of spent nuclear fuel, the fact that the tubes may be made larger in this respect is of a great advantage. Accordingly, for the above reasons, Applicants respectfully request that the rejection of claim 18 be withdrawn.

Next, in item 9 of the Office Action, claims 1-17, 19-34, and 48-58 have been rejected under 35 U.S.C. § 103(a) as being rejected unpatentable over Soot as applied to claim 18, and further in view of U.S. Patent No. 4,630,738 issued to Bosshard (hereafter "Bosshard"). A prima facie case of obviousness is established only when the prior art teaches or suggests all of the elements of the claims. MPEP §2143.03, In re Rijckaert, 9 F.3d 1531, 28 U.S.P.Q2d 1955, 1956 (Fed. Cir. 1993). As an initial matter, it is noted that claims 11 and 52 have been canceled herein, thereby rendering this rejection moot with respect to such claims. For the reasons that follow, Applicants respectfully request that the rejection of claims 1-10, 12-17, 19-34, 48-51, and 53-58 be withdrawn.

It is noted that claims 1, 8, 28, and 48 have been amended herein so as to cite subject matter similar in scope with that of claim 18 above. In particular, these claims each specify that the rods are disposed in the recesses of at least two of the tubes. As stated above, this provides the distinct advantage in that the tubes are larger since the structure between them (i.e., the rods and pin that connects the rods) does not take up any extra room given that the rods fit within the recesses of the

tubes. Consequently, the tubes advantageously allow for the storage of greater amounts of spent nuclear fuel.

It is noted, that the Office Action states on page 6 as follows:

Receiving rods in recesses at corners of the tubes is structurally equivalent to forming the rods as an integral part of the tube corner. Unless there is something particularly inventive or unexpected about the mode of integration of these parts – and in the present application this is not the case – such a structure is not considered inventive. Citing In Re Larson 340 of 2nd 965, 968, 144 USPQ 347, 349 (CCPA 1965).

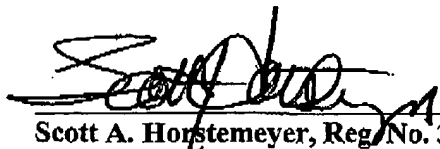
Applicants respectfully disagree. In particular, at least one benefit is achieved by virtue of the claimed configuration in that the tubes are larger, thereby facilitating larger amount of spent nuclear fuel. In addition, Applicant asserts that the cited references of record do not show or suggest rods being disposed in the recesses of at least two of the tubes.

Accordingly, Applicants respectfully request that the rejection of claims 1, 8, 18, 28, and 48 be withdrawn. In addition, Applicants respectfully request that the rejection of claims 2–7, 9–10, 11–17, 19–27, 29–34, 49–51, and 53–58 be withdrawn as depending from claims 1, 8, 18, 28 or 48.

CONCLUSION

Applicants respectfully request that all outstanding objections and rejections be withdrawn and that this application and presently pending claims be allowed to issue. If the Examiner has any questions or comments regarding this response, the Examiner is encouraged to telephone the undersigned counsel of Applicants.

Respectfully submitted,



Scott A. Horstemeyer, Reg. No. 34,183

THOMAS, KAYDEN,
HORSTEMEYER & RISLEY, L.L.P.
Suite 1750
100 Galleria Parkway N.W.
Atlanta, Georgia 30339
(770) 938-9500

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☒ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.